

## In the spotlight - the Puja alcohol clock

### Are these electric clocks?

Sure they are, so here's the story! Puja is believed to come from the German word "Pulshammer" which means pulse hammer..... The patent was granted to Karl Jauch from the Jauch und Schmid Uhrenfabrik (Jundes) in Schwenningen, Germany in 1941. The production of the clocks started in 1945.

How does it work? At the bottom left sits a black resistor that acts as a heater; it runs from the 220 mains voltage. It warms up the alcohol in the lower glass container to its boiling point at 78 degrees Centigrade. The alcohol expands and slowly flows into the top right container. Gravity then makes the unit turn a quarter and the next container is heated. This goes on and on and makes the containers rotate continuously around its axle. The rotation acts as the winding key for the clock. To see the clocks in full operation click [here](#).

In most clocks only alcohol is used in the containers, however there are a few clocks known with much smaller containers filled with alcohol and mercury. In that case the alcohol is pushing up the mercury and thanks to the bigger weight of the mercury even these small containers do their winding job perfectly.

Complete clocks with their original case are rarely found, probably because most cases are equally huge as ugly.... The cases were cheaply made and sometimes beautifully decorated.....at least to the taste of the 1940s...

So, sure they are electric clocks, visit the album of the maker [here](#)

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